

Updt	Database	Query	Time	Comment
S1126	U	USPT,PGPB,JPAB,EPAB,DWPI (kit and antibody and (mycobacterium or mycoplasma or listeria) ) and kit.clm. and antibody.clm.	2002-09-30 16:35:22	
S1125	U	USPT,PGPB,JPAB,EPAB,DWPI kit and antibody and (mycobacterium or mycoplasma or listeria)	2002-09-30 16:34:37	
S1124	U	USPT,PGPB,JPAB,EPAB,DWPI ((kit and antibody and DNA and (mycobacterium or mycoplasma or listeria) )and antibody.clm. ) and kit.clm.	2002-09-30 16:28:15	
S1123	U	USPT,PGPB,JPAB,EPAB,DWPI (kit and antibody and DNA and (mycobacterium or mycoplasma or listeria) ) and antibody.clm.	2002-09-30 16:28:02	
S1122	U	USPT,PGPB,JPAB,EPAB,DWPI kit and antibody and DNA and (mycobacterium or mycoplasma or listeria)	2002-09-30 16:26:36	
S1121	U	USPT,PGPB 5989553.pn. and synthetic	2002-09-30 10:33:47	
S1120	U			



USPT,PGPB

5703057.pn.

2002-09-30

09:44:14

S1119

U

USPT,PGPB

5989553.pn.

2002-09-30

09:43:26



```
=> s expression library and antibody
522510 EXPRESSION
10237 EXPRESSIONS
527387 EXPRESSION
      (EXPRESSION OR EXPRESSIONS)
46904 LIBRARY
13871 LIBRARIES
53630 LIBRARY
      (LIBRARY OR LIBRARIES)
2423 EXPRESSION LIBRARY
      (EXPRESSION(W) LIBRARY)
398626 ANTIBODY
413096 ANTIBODIES
615119 ANTIBODY
      (ANTIBODY OR ANTIBODIES)
L1      1272 EXPRESSION LIBRARY AND ANTIBODY
```

```
=> s l1 and DNA
662104 DNA
11366 DNAS
663484 DNA
      (DNA OR DNAS)
L2      998 L1 AND DNA
```

```
=> s expression(w)library and antibody
522510 EXPRESSION
10237 EXPRESSIONS
527387 EXPRESSION
      (EXPRESSION OR EXPRESSIONS)
46904 LIBRARY
13871 LIBRARIES
53630 LIBRARY
      (LIBRARY OR LIBRARIES)
2423 EXPRESSION(W) LIBRARY
398626 ANTIBODY
413096 ANTIBODIES
615119 ANTIBODY
      (ANTIBODY OR ANTIBODIES)
L3      1272 EXPRESSION(W) LIBRARY AND ANTIBODY
```

```
=> s l3 and DNA and immunize
662104 DNA
11366 DNAS
663484 DNA
      (DNA OR DNAS)
1584 IMMUNIZE
32 IMMUNIZES
1615 IMMUNIZE
      (IMMUNIZE OR IMMUNIZES)
L4      5 L3 AND DNA AND IMMUNIZE
```

```
=> display l4
ENTER ANSWER NUMBER OR RANGE (1):1-5
ENTER DISPLAY FORMAT (BIB):bib abs
```

```
L4      ANSWER 1 OF 5      MEDLINE
AN      1999360933      MEDLINE
DN      99360933      PubMed ID: 10433551
TI      Genetic live vaccines mimic the antigenicity but not pathogenicity of live
viruses.
AU      Sykes K F; Johnston S A
CS      Center for Biomedical Inventions, Department of Internal Medicine, The
University Texas-Southwestern Medical Center, Dallas 75235-8573, USA...
```



sykes@ryburn.swmed.edu

SO DNA AND CELL BIOLOGY, (1999 Jul) 18 (7) 521-31.  
Journal code: 9004522. ISSN: 1044-5498.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; AIDS

EM 199908

ED Entered STN: 19990910  
Last Updated on STN: 19990910  
Entered Medline: 19990826

AB The development of an effective HIV vaccine is both a pressing and a formidable problem. The most encouraging results to date have been achieved using live-attenuated immunodeficiency viruses. However, the frequency of pathogenic breakthroughs has been a deterrent to their development. We suggest that **expression libraries** generated from viral DNA can produce the immunologic advantages of live vaccines without risk of reversion to pathogenic viruses. The plasmid libraries could be deconvoluted into useful components or administered as complex mixtures. To explore this approach, we designed and tested several of these genetic live vaccines (GLVs) for HIV. We constructed libraries by cloning overlapping fragments of the proviral genome into mammalian expression plasmids, then used them to **immunize** mice. We found that inserting library fragments into a vector downstream of a secretory gene sequence led to augmented **antibody** responses, and insertion downstream of a ubiquitin sequence enhanced cytotoxic lymphocyte responses. Also, fragmentation of gag into subgenes broadened T-cell epitope recognition. We have fragmented the genome by sequence-directed and random methods to create libraries with different features. We propose that the characteristics of GLVs support their further investigation as an approach to protection against HIV and other viral pathogens.

L4 ANSWER 2 OF 5 MEDLINE

AN 1999343758 MEDLINE

DN 99343758 PubMed ID: 10415048

TI Protective immune responses induced by vaccination with an expression genomic library of Leishmania major.

AU Piedrafita D; Xu D; Hunter D; Harrison R A; Liew F Y

CS Department of Immunology, University of Glasgow, Glasgow, United Kingdom.

SO JOURNAL OF IMMUNOLOGY, (1999 Aug 1) 163 (3) 1467-72.  
Journal code: 2985117R. ISSN: 0022-1767.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 199908

ED Entered STN: 19990820  
Last Updated on STN: 19990820  
Entered Medline: 19990812

AB To develop an effective vaccine against the intracellular protozoan parasite Leishmania spp., we investigated the feasibility of **expression library** immunization (ELI) in the mouse. Genomic **expression libraries** of L. major were constructed and used to **immunize** mice. One of the three libraries (L1, with 10(5) clones) induced a significant protective immune response and delayed the onset of lesion development in highly susceptible BALB/c mice after i.m. immunization, compared with control mice immunized with the empty vector (EV). L1 was then divided into five sublibraries of approximately 2 x 10(4) clones each. Mice immunized with one of the sublibraries (SL1A) developed an even stronger protective effect than that induced by L1. SL1A was further divided into 20 sublibraries (SL2) of approximately 10(3) clones each. One of the SL2 libraries (SL2G) induced a strong protective effect against L. major infection. In direct comparative



studies, the protective effect of the sublibraries was in the order of SL2G > SL1A > L1. Lymphoid cells from mice vaccinated with SL2G produced more IFN-gamma and NO, compared with cells from control mice injected with EV. Serum from the vaccinated mice also contained more parasite-specific IgG2a Ab, compared with controls. Therefore, these data demonstrate that ELI is feasible against this complex intracellular parasitic infection, by preferentially inducing the development of Th1 responses. Furthermore, by sequential division of the libraries, this approach may be used to enrich and identify protective genes for effective gene vaccination against other parasitic infections.

L4 ANSWER 3 OF 5 MEDLINE  
 AN 97234635 MEDLINE  
 DN 97234635 PubMed ID: 9079909  
 TI Sequence analysis and characterization of a 40-kilodalton *Borrelia hermsii* glycerophosphodiester phosphodiesterase homolog.  
 AU Shang E S; Skare J T; Erdjument-Bromage H; Blanco D R; Tempst P; Miller J N; Lovett M A  
 CS Department of Microbiology and Immunology, UCLA School of Medicine, Los Angeles, California 90095, USA.. eshang@microimmun.medsch.ucla.edu  
 NC AI-21352 (NIAID)  
 AI-29733 (NIAID)  
 AI-37312 (NIAID)  
 +  
 SO JOURNAL OF BACTERIOLOGY, (1997 Apr) 179 (7) 2238-46.  
 Journal code: 2985120R. ISSN: 0021-9193.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 OS GENBANK-U65980  
 EM 199704  
 ED Entered STN: 19970507  
 Last Updated on STN: 19990129  
 Entered Medline: 19970429  
 AB We report the purification, molecular cloning, and characterization of a 40-kDa glycerophosphodiester phosphodiesterase homolog from *Borrelia hermsii*. The 40-kDa protein was solubilized from whole organisms with 0.1% Triton X-100, phase partitioned into the Triton X-114 detergent phase, and purified by fast-performance liquid chromatography (FPLC). The gene encoding the 40-kDa protein was cloned from a *B. hermsii* chromosomal DNA lambda EXlox expression library and identified by using affinity antibodies generated against the purified native protein. The deduced amino acid sequence included a 20-amino-acid signal peptide encoding a putative leader peptidase II cleavage site, indicating that the 40-kDa protein was a lipoprotein. Based on significant homology (31 to 52% identity) of the 40-kDa protein to glycerophosphodiester phosphodiesterases of *Escherichia coli* (GlpQ), *Bacillus subtilis* (GlpQ), and *Haemophilus influenzae* (Hpd; protein D), we have designated this *B. hermsii* 40-kDa lipoprotein a glycerophosphodiester phosphodiesterase (Gpd) homolog, the first *B. hermsii* lipoprotein to have a putative functional assignment. A nonlipidated form of the Gpd homolog was overproduced as a fusion protein in *E. coli* BL21(DE3)(pLysE) and was used to immunize rabbits to generate specific antiserum. Immunoblot analysis with anti-Gpd serum recognized recombinant *H. influenzae* protein D, and conversely, antiserum to *H. influenzae* protein D recognized recombinant *B. hermsii* Gpd (rGpd), indicating antigenic conservation between these proteins. Antiserum to rGpd also identified native Gpd as a constituent of purified outer membrane vesicles prepared from *B. hermsii*. Screening of other pathogenic spirochetes with anti-rGpd serum revealed the presence of antigenically related proteins in *Borrelia burgdorferi*, *Treponema pallidum*, and *Leptospira kirschneri*. Further sequence analysis both upstream and downstream of the Gpd homolog showed additional homologs of glycerol metabolism, including a



glycerol-3-phosphate transporter (GlpT), a glycerol-3-phosphate dehydrogenase (GlpD), and a thioredoxin reductase (TrxB).

L4 ANSWER 4 OF 5 MEDLINE  
AN 96026302 MEDLINE  
DN 96026302 PubMed ID: 7566175  
TI Protection against mycoplasma infection using **expression-library** immunization.  
AU Barry M A; Lai W C; Johnston S A  
CS Department of Medicine, University of Texas Southwestern Medical Center, Dallas 75235-8573, USA.  
SO NATURE, (1995 Oct 19) 377 (6550) 632-5.  
Journal code: 0410462. ISSN: 0028-0836.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals; AIDS  
EM 199511  
ED Entered STN: 19951227  
Last Updated on STN: 19951227  
Entered Medline: 19951114  
AB As is evident from the human immunodeficiency virus epidemic, there is no systematic method for producing a vaccine. Genetic immunization is a new approach to vaccine production that has many of the advantages of live/attenuated pathogens but no risk of infection. It involves introducing **DNA** encoding a pathogen protein into host cells and has shown promise in several disease models. Here we describe a new method for vaccine development, **expression-library** immunization, which makes use of the technique of genetic immunization and the fact that all the antigens of a pathogen are encoded in its **DNA**. An **expression library** of pathogen **DNA** is used to **immunize** a host thereby producing the effects of antigen presentation of a live vaccine without the risk. We show that even partial **expression libraries** made from the **DNA** of *Mycoplasma pulmonis*, a natural pathogen in rodents, provide protection against challenge from the pathogen. **Expression library** immunization may prove to be a general method for vaccination against any pathogen.

L4 ANSWER 5 OF 5 MEDLINE  
AN 90175386 MEDLINE  
DN 90175386 PubMed ID: 2408041  
TI Molecular cloning of a cDNA encoding a major pathogenic domain of the Heymann nephritis antigen gp330.  
AU Pietromonaco S; Kerjaschki D; Binder S; Ullrich R; Farquhar M G  
CS Department of Cell Biology, Yale University School of Medicine, New Haven, CT 06510.  
NC DK08096 (NIDDK)  
DK17724 (NIDDK)  
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1990 Mar) 87 (5) 1811-5.  
Journal code: 7505876. ISSN: 0027-8424.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
OS GENBANK-M31051  
EM 199004  
ED Entered STN: 19900601  
Last Updated on STN: 19900601  
Entered Medline: 19900406  
AB Heymann nephritis is an experimental autoimmune disease in rats that is characterized by accumulation of immune deposits (IDs) in kidney glomeruli. The disease is initiated by the binding of circulating



**antibodies** to a membrane glycoprotein, gp330, which is a resident protein of clathrin-coated pits on glomerular epithelial cells (podocytes). We have defined a domain representing about 10% of gp330 that appears to be responsible for the formation of stable glomerular IDs. A cDNA clone (clone 14) was isolated from a rat kidney cDNA **expression library** by screening with IgG eluted from glomeruli of rats in early stages (3 days) of passive Heymann nephritis. The clone 14 cDNA contains an open reading frame encoding the C-terminal 319 amino acids of gp330. The predicted amino acid sequence contains four internal repeats of 11 amino acids, which are also found in the putative ligand-binding region of carbohydrate-binding lectin-like receptors. An **antibody** raised against the clone 14 fusion protein recognized gp330 by immunoblotting and induced formation of subepithelial IDs typical of passive Heymann nephritis when injected into normal rats. When the clone 14 fusion protein was used to **immunize** rats, subepithelial IDs of active Heymann nephritis were found after 12 weeks. No IDs were formed by active or passive immunization of rats with fusion proteins derived from other regions of gp330. These results demonstrate that clone 14 encodes a region of gp330 responsible for **antibody** binding and ID formation in vivo.

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	3.28	3.49

STN INTERNATIONAL LOGOFF AT 10:19:01 ON 30 SEP 2002